

8532
To be sanctioned by Act of Parliament.

59716/P
(P)
A NATIONAL

Light and Heat Company,

FOR PROVIDING OUR

STREETS AND HOUSES

WITH

HYDROCARBONIC GAS-LIGHTS,

On similar Principles as they are now supplied with Water.

FOUR TABLES OF CALCULATION,

Founded on official Experiments, prove the immense
National Profits, and Increase of Revenue,
by the adoption of this Plan.

WHICH IS TO BE HAD AT THE

National Light and Heat Company's Office,

No. 97, PALL MALL,

And at the Banking Houses of

Messrs. Devaynes, Dawes, Noble, and Co. No. 39, Pall-Mall;
Sir Matthew Bloxam, Wilkinson, Taylor, and
Bloxam, 27, Gracechurch-street, and at Lloyd's,
Willis's, and Batson's, Coffee-Houses.

LONDON:

PRINTED FOR F. A. WINSOR, THE PATENTEE,

By G. SIDNEY, Northumberland-street, Strand.

[1807?]

ADVERTISEMENT.

SINCE the first Edition of the following Tables of Estimate calculation (into which some typographical errors had crept,) several superficial insinuations have been made, purporting, "that my calculations of Profits appeared too wonderful to be true!" To all similar remarks I must beg leave to reply, that the annual course of our Planet round the Sun, and its diurnal rotations round its axis, have appeared, and do appear, still more wonderful than my tables of profit; but they are nevertheless true.

Whoever will not take the trouble to investigate the first principles of Astronomy, must remain as doubtful of its seeming wonders, as those who wish to partake of the great profits of my discovery, but who will not ascertain facts to remove their doubts.

I only intreat the reader to attend to the official experiments, made at the Lyceum. They clearly proved, that two pecks of Coal produced the value of 6s. 5d. in products, during the space of a few hours, which is at the rate of 23l. 2s. per Chaldron. Now have the goodness to apply the simple rule of three, viz.

If 1 Ch. contain 23l. 2s. how much contain 10,500,000 Ch. the annual average consumption of the Realm? Ans. £242,550,000

Deduct the cost of Coal and Carbonizing as per

<i>Table C.....</i>	<i>13,196,373</i>
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Net annual profits agreeable to the Official

<i>Experiments.....</i>	<i>£229,353,627</i>
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But my estimate Tables will shew how many allowances, deductions, and undervaluations I have made for contingencies, to reduce the above enormous Sum to near one half, viz. to 114,845,294l. Now if my readers will search for and collect all farther objections they can possibly imagine, I will abate 9-10ths of the last Sum, and the remaining tenth, must insure them an annual interest of 570l. for every 5l. Deposit, soon after the complete Establishment of this Company, according to my proposals.

F. A. WINSOR.



*The following Extract of the Minutes of a
Sub-Committee*

Appointed to examine and verify my *discovery*, by two *different experiments*, on the 20th and 27th of October, at the *Lyceum*, is offered as a proof how far I have *underrated* the *quantity* of my products in my former PRINTED ESTIMATE.

Average Produce of 36lb. or 2 Pecks of Coal, carbonized in the Patent Light Stove.

16. oz.

24 2 or 3 pecks in measure, of fine patent Coke,
proved to increase 50 per cent.—Estimated
by me at only - - - - - 33 pr. c

3 12 of fine empyreumatic Oil-Tar, for painting, &c.
proved to contain 1-10th of its weight.---
Estimated by me at only - - - 1-12th

4 6 of Ammonial Liquor of Salts, &c. proved to contain 1-8th of its weight.---Estimated by me at only - - - - - 1-9th.

3 12 of Inflammable Gas, *proved* equal to 40 lights,
or 5lb. of Candles, worth 5s.---Estimated
by me as the value of Coal, at only - - 1cd.

36 O being the whole weight and substance of the above two
pecks of Coal.

Valuation of the said *Products*, which, in its raw state, cost, at the highest, 10d. being at the rate of 5s. per Sack, or 60s. per Chaldron, of 36 Bushel of Coal.

pecks. s. d.

3 of patent Coke, a far superior *fuel*, of double
heat; estimated only as Coal - - - 1 3

lb. oz.

3 12 of patent Oil-Tar, a far superior *paint*, of double
force; estimated as common Coal-Tar, 15s.
per 112lb. - - - - - 0 6

4 6 of patent Ammonia, of great strength and pungency; estimated at 1s. per Gallon.

3 12 of patent *Hydrocarbonic Gas*, brilliantly burning,
equal to 40 Candles, of 5lb. weight, at 10d. 4 2

Total value of products, 6 5

A 2

Hence, deducting 10d. the cost of Coal, there remains 5s. 7d. or 670 per cent. profit. BESIDES the double *heat* of *Coke*, the great heat of the *process*, and the *heat* of the *lights*, all of which must turn to a profitable use in houses and manufactories.

Farther Proofs of the ultimate great Benefits.

- A. All our Oils, Wax, Tallow, Tar, and Pitch, we obtain either in distant Seas, or purchase in Foreign Markets, at a great expense, and they produce Soot, Dirt, and Smoke, during Combustion.
- B. All the products from our Coal will henceforth not only supply our own wants, but leave plenty for a profitable exportation, together with most of our Oils, Wax, and Tallow Candles.
- C. Hence the great Foreign Expenditure will not only gradually *cease*, but *must* convert itself as gradually into *immense gain*, from the sale of these new products, in all Foreign Markets, in the four quarters of our Globe; where we can *undersell* all rival nations.
- D. Our Exportations will obtain a most considerable increase; of course they *must* surpass our importations in a still higher and more advantageous degree, which will turn the Foreign Exchanges still more in our favour.
- E. By the Saving and Export of these new products, our Trade, Navigation, Fisheries, and Nurseries for Seamen, must absolutely increase instead of lessen, as has been too superficially apprehended.

TABLE A.

ESTIMATE of the immense Saving and Profit on the general application of this Discovery throughout the United Kingdoms.

THE computation of a moderate consumption of Coals, &c. in and about London, is estimated, on an average, between 1,000,000* and 1,300,000 tons weight; but taking the lowest average of 1,000,000 weight for London, they would, in my *patent Process of Carbonization, decomposition of Smoke, &c.* yield the following *valuable Products*,

* On Friday, the 9th of May, it was stated by Mr. Curwen, in the *House of Commons*, that the importation of Coals into the Metropolis, exceeded 1,000,000 chaldrons, and my estimate only amounts to 750,000 chaldrons, which is another material proof in favour of my calculations.

TABLE A.

THE FIRST PRODUCT OF

1,000,000 Tons of Pit-Coal, are 1,500,000 Tons Measure of superior Coke, for home consumption and exportation; but I will allow even the whole increase of 500,000 Tons in the measure of Coke for combustion and waste, in my process, there remains the same quantity in the *measure* of Coke, as we used in *weight* of Coal, viz. 1,000,000 Tons of Coke. Hence 133 1-3d Tons weight of Coal, allowing 25 cwt. to every chaldron, will give us 100 chaldrons: we obtain from the London consumption of 1,000,000 tons, 750,000 chaldrons measure of Coke, valued instead of 48 or 50s. the present prices, only at 30s.

1,125,000

N. B. In the public Estimates of all the London consumptions for several years past, the article of Coal is rated at 827,514 Chaldrons, exceeding the above estimate by 313,428 Chaldrons. In 1803, this consumption was even rated at 940,470½ Chaldrons, Newcastle; 4577 Tons Scotch Coal, making in all 944,267½ Chaldrons, or 1,259,015 Tons.—Thus I hope not to be accused of exaggeration, having so greatly undervalued my own estimate.

THE SECOND PRODUCT OF ONE MILLION TONS OF COAL WILL BE

100,000 Tons of empyreumatic Oil-Tar, being one-tenth of the whole weight of Coal, which I have found to be the average weight of good Newcastle Coal, during my several experiments; some Coal yield more and some less, as to their quality.

Though the common Coal-Tar is sold at 14*l.* per Ton, and mixed with certain colours, as high as 1*s.* 6*d.* per lb. I shall estimate this at 10*l.* only.

1,000,000

THE THIRD PRODUCT WILL BE NEARLY

100,000 Tons of Ammonial Liquor, which, when chrystallized into Sal Armoniac only, is worth 10*l.* 10*s.* per cwt. and may be made into still more valuable Salts, I shall only value at 10*l.* per 250 Gallons.

1,000,000

 £.3,125,000

THE FOURTH AND MOST VALUABLE PRODUCT WILL BE MORE THAN

7,500,000 Cubic feet of *hydrocarbonate Gas*, the value of which I have endeavoured to *approximate* by the proportion of one Bushel of Coal, yielding, more or less, 8s. in pure light, since by repeated experiments with 2 pecks of Coal, I have obtained from 40 to 50 lights, equal to 8½lb. of Candles, at 1s. in duration, but much more brilliant in flame. However, I shall rate the light at 5s. value per Bushel, and allowing 25 cwt. per chaldron of 36 Bushels, (though some Coals will weigh near 28 cwt.) we have 27 millions of Bushels, at 5s. each - - - - - 6,750,000

Total Savings for London and its Environs - - - - - 9,875,000

But to obtain some approximate idea of the *grand total* for the whole Realm, we may reasonably infer that the whole consumption of the Country, including all the great manufacturing Towns, where thousands of Tons of Coal are burnt into Coke, or otherwise consumed every day and night, is in a ratio as to the number of its inhabitants, with that of the metropolis, viz. as 13 to 1; hence, if we multiply the foregoing sum by 13, we obtain the total produce for the Country, of - - - - - £128,375,000

ALLOWANCE.

Though all the above products, excepting Coke, bear nearly the same proportion of value in the Country, (nay, I apprehend that Oil, Wax, Tallow, foreign Tar, &c.) are dearer, on account of additional freights and commissions from the metropolis, still I shall deduct one-third of the estimated produce of Coke and Coal-Tar, for the lesser prices they might *bear* in the Country.—The London estimate of Coke and Tar is 2,125,000, and that of the Country 27,625,000, one-third of which is - - - - - 9,208,333

Leaving the reduced Country proceeds at - - - - - 118,166,667

Which gives the grand Total Saving and Profit for London and Country - - - - - £128,041,667

TABLE B.

ESTIMATE OF EXPENSES.—FIRST COST FOR LONDON.

A. From 68 to 685 Furnaces, &c. in and about London, to hold from 1 to 10 Chaldrons, and to Carbonize each from 3 to 30 Chaldrons in 24 hours, at a ratio of £100 for each Chaldron Furnace	£.	68,508
N. B. The Apparatus might be so constructed as to work from 1 to 20 Chaldrons, or more, at a time, 3 times in 24 hours, which would lessen their number, but their costs would remain as to their size; thus I have estimated 685 Chaldron Furnaces at £100 each.	-	-
B. From 68 to 685 slight sheds to cover the Apparatus and Products, including the necessary Tools, at £15	10,275	
	<hr/>	78,775

N. B. If we obtain any neglected spots of ground in the Parish Work or Poor Houses, we can allow them heat and light instead of paying rents.

ANNUAL COSTS FOR LONDON.

C. 750,000 Chaldrons of Coal, at the highest Summer prices, 40s.	-	£1,500,000
N. B. Should the Company employ their own Vessels and Barges, for Sea and Canal Services, from 10 to 15s. might be saved on each Chaldron: and if the Company became possessed of any Mines themselves, the saving would still be greater.	-	-
D. 2740 Men and Boys £40 each, or £50 each Man, and £30 each Boy, to live on the premises, rating 4 heads to each Chaldron Furnace, to relieve each other by day and night	-	109,600
E. Annual repairs for Furnaces and Apparatus £10	-	6,850
F. Annual Ground Rent and Taxes at £5	-	3,425
G. General Office, Rent, Clerks, Porters, Stationary, Printing, Advertising, Postages	-	-
Stamps, &c.	-	1,500
	<hr/>	1,621,375
		<hr/>
		£1,700,150
		<hr/>

A. From 890 to 8905, or 13 times the number of London Furnaces for the Country, estimating them on an average of half the London costs, at 50 <i>l</i> .	-	-	-	-	-	890,500
B. From 890 to 8905 slight Sheds to cover the Apparatus and Products, at 7 <i>l</i> . 10 <i>s</i> .	-	-	-	-	-	66,787
N. B. perhaps many old places might be obtained, gratuitously, for an allowance of Heat and Light.						<hr/> £957,287

ANNUAL COST FOR THE COUNTRY.

C.	9,750,000 Chaldrons of Coal for the Country consumption, at the highest average, 20s. N. B. In the neighbourhood of the Mines, Coals may be purchased from 10 to 15s. the Kiell, or <i>double Chaldron</i> .	9,750,000
D.	17,810 Men, and as many Lads, viz. four heads to each Chaldron Furnace, or as many more heads as the Furnace contains Chaldrons, to live on the Premises, rated at half the London costs, 20 <i>l.</i> each, or 25 <i>l.</i> for every Man, and 15 <i>l.</i> for every Lad,	712,400
E.	Annual repairs of Furnaces and Apparatus, at half the London costs, viz. 5 <i>l.</i> each chaldron Furnace.	44,524
F.	Annual Ground Rent and Taxes, at 2 <i>l.</i> 10s. each Chaldron Furnace,	22,262
G.	Rent for Offices, Clerks, Stationary, Printing, Advertising, Stamps, Postages, &c. rated at half the London costs, multiplied by 13,	9,750

10,538,936

£11,496,223

RECAPITULATION.

<i>First Cost for London and its Environs</i>	78,775	
<i>Annual Cost ditto</i>	1,621,375	
	<hr/>	
<i>Total Cost for London</i>		1,700,150
<i>First Cost for the Country</i>	957,287	
<i>Annual Cost ditto</i>	10,538,936	
	<hr/>	
<i>Total Cost for the Country</i>		1,11,496,223
		<hr/>
<i>Grand Total of Cost for the whole Realm</i>		1,13,196,373
		<hr/>

RECAPITULATION OF SAVING AND PROFIT.

I. Saving and Profit from the London Product.....	9,875,000	
II.- Deduct First and Annual Cost, from ditto.....	1,700,150	
	<hr/>	
BALANCE of Profit for London,---above eight million.....		1,8,174,850
III. Saving and Profit from the Country Products.....	118,166,667	
IV. Deduct <i>First</i> and Annual Cost from ditto.....	11,496,223	
	<hr/>	
BALANCE of Profit for the Country, viz, near one hundred and seven millions.....		106,670,444
		<hr/>
GRAND BALANCE of Profit for the Realm, near one hundred and fifteen millions,		1,114,845,294
		<hr/>

TABLE C.

ESTIMATE of all the Wax, Spermacæti, Tallow, Oil, &c. annually consumed in the United Kingdom.

As 14,000,000 inhabitants have been rated, by *parochial Estimate*, to dwell in 1,400,000 Palaces, Mansions, Houses, &c. at a ratio of 10 persons to each dwelling, I have estimated the whole consumption of Light in the Realm on the following Scale, which, on due consideration, I trust, my Readers will find the nearest approximation to accuracy.

TABLE C.

10,000 Private Palaces, Mansions, Seats, Villas, &c. where frequent Routs, Balls, Assemblies, Concerts, Masquerades, Illuminations, &c. are given, some of which have cost above 100%. I only rate at.....	£. 5	s. 0	d. 0	per night	£. 50,000
20,000 Fashionable Houses of the 2nd Rank, where Entertainments are given once or twice every Week, at.....	2	10	0	-	50,000
30,000 Fashionable Houses of the 3rd Rank.....	1	0	0	-	30,000
40,000 Houses of Gentry, &c.....	0	10	0	-	20,000
60,000 Ditto.....	0	5	0	-	15,000
100,000 Ditto.....	0	2	6	-	12,500
150,000 Ditto Citizens, Tradesmen and Farmers*.....	0	1	6	-	11,250
200,000 Ditto.....	0	1	0	-	10,000
300,000 Ditto Journeymen, Labourers, and Peasants.....	0	0	6	-	7,500
490,000 Ditto.....	0	0	3	-	6,125
<hr/> 1,400,000 Dwellings, <hr/>					<hr/> 212,375 <hr/> 365 <hr/>

This estimate consumption of every 24 hours being multiplied by 365 days, we obtain

1,77,516,875

* The numerous artists and artificers working at home, in what is termed job-work, are often found by dozens in a house, each employing one or two lamps in their rooms.

Next we ought to estimate all the public Streets, Bridges, Roads, Turnpikes, Coaches, Watch and Guard-Houses, Watchmen, &c. at one Lamp to every fourth House, at 1d. each night.....

All public Theatres, Concerts, Balls, Masquerades, Illuminations, Exhibitions, Lectures, Vauxhalls, and Shews of every kind, at.....

Our numerous Public Offices, Banking and Counting Houses, Shops, Manufactories and working places of every Description.....

Hotels, Inns, Taverns, Coffee-Houses, Eating-Houses, Clubs, and Public-Houses, all over the three United Kingdoms.....

532,291

5,000,000

10,000,000

5,000,500

Grand Total of Light expended in the Realm £.98,049,166

N. B. The value of Heat and Light gained from the decomposition of Smoke, I only estimated at 5s. instead of 8s. per Bushel, which latter sum is its real produce. It amounts, for London and the Country, to 94,50,000*l*. Hence, if I increase my Estimate from 5s. to 5s. 6d. per Bushel, instead of 8s. I obtain 9,450,000*l*. more, or 103,950,000*l*. as a full equivalent for the estimate consumption, yet more pure and brilliant Light. But on stating the full and true value of 8s. per Bushel, we gain the immense product of 151,200,000*l*. thus a surplus of 48,713,225*l*. in light, which would afford a very superior Brilliancy, not only to our Cities, Towns, and their Environs, but would suffice to light up all the High Roads of the Empire besides; and which is not included in the above Estimate; nor have I valued the quantities of Oil, Tallow, and Wax *spilt* and *wasted* by the carelessness of Servants, by the leakage of Lamps, and running of Candles; the great consumption of Cotton in Wicks, and the waste of that expensive and dangerous Spirit of Wine, used in heating Plates, Tea-Kettles, &c. The Candlesticks, Lamps, Glasses, Snufflers, &c. continually destroyed, and the *time* daily wasted in cleaning them, bears no small proportion in the above Estimate.

TABLE D.

Of the Increase of Revenue, and the fairest means of introducing a general application of this Discovery, by the Laws of the Realm.*

I. Four, five, or six months after passing the new law for the general use of *Heat and Light*, from Coke and Gas, a Tax of 3½d. per Bushel, or 10s. 6d. per Chaldron for all farther burning of crude Coal. This Tax cannot be oppressive in the least, because it falls on the obstinate only, who shall resist the use of a far superior, cheaper, and safer Fuel. Thus 715,000 Chaldron for London, being estimated ratable at only half that quantity still used in spite of the Tax of 10s. 6d. each, the number of 315,000 Chaldrons will produce yearly..... 196,875

The Country Tax, on account of Coals being cheaper, I shall rate at half, or 5s. 3d. per Chaldron. Thus 9,750,000, estimated ratable as only half that number, viz. 4,875,000 will produce yearly..... 1,279,687

Being an easy and gratifying addition to our National Revenue of..... 1,1476,562

But in proportion as this Tax decreases, by a more progressive adoption of the use of Coke and Gas, it is to be paid by the Company, with 20 per cent. addition, which, in case of *general use*, would be a further annual sum of..... 315,312

* If, by the wisdom of the legislature, an Act of Parliament passed in favour of the button-makers, obliging every man to wear metal instead of cloth buttons, surely the same legislative wisdom will never refuse to sanction and protect a discovery of such superior magnitude, nor can it be thought any hardship to tax the obstinate for counteracting his own as well as his country's benefit.

A certain yearly resource from half the quantity of Coals now used in the Realm, in addition to all the present existing Taxes and Port Dues

1,791,874

All those desirous of having their Houses supplied with Patent Coke, to give an Estimate (even on Oath, if required) of the quantity of Coals they used to consume during the last years, and the prices paid for them; for they will receive the same in measure of Coke, which gives *double Heat and a clear Fire*, at 20 per cent. cheaper.

II. During four months after passing the said new law, every Housekeeper and Lodger to be obliged to give a fair estimate (on Oath, if required,) of the quantity of Candles or Oil consumed by him and his Family, and six months after the date of the Act, if his House or Apartment is not fitted up to be supplied with Gas, a Tax to be paid of 2*d.* on every pound of Tallow Candles, or pint of common Lamp Oil;—6*d.* on every pound of Spermæceti, and Wax Candles, and on each pint of fine Lamp Oil consumed in Chandeliers, Lustres, Hall, Passage Lamps, and every other place where Light is generally kept and wanted as a *fixture*. A fair allowance to be made for any quantity of Candles and Oil used for portable lights occasionally to be moved, such as Table Lights, Lanthorns, Coach-Lamps, &c. although after general use of Gas Light, in *numerous fixed* places, there will be little necessity for *moveable* Lights. It is, however, great policy to introduce the new means *progressively*, only, to give Oilmen and Chandlers time and opportunity to become initiated to the exportation, instead of retailing their articles at home, though some Oil, Tallow, and Wax, will always remain in use for *moveable Lights*.

Carried forward £.1,791,874

N. B. The decreasing duties from *any* decrease in the import of oil, wax, and tallow, will bear a threefold increase on the consumption and exportation of so many new products gained at home from noisable smoke. I hope and trust the enlightened Public will soon be convinced, by their *own interests*, to use coke and gas light; yet, if any legal means are found necessary for the introduction, I have taken the liberty to give my humble opinion, as to the best ways or means to further so salutary an object.

Brought forward 1,791,874

This Tax, on *objecting* to the Gas Light, might become very productive, and perhaps bear a tenfold proportion to that of Coal, before the new laws would be generally obeyed, yet we shall only rate it at a fivefold production of the Coal for the first year of its commencement. Hence five times the above amount is

8,959,370

£.10,751,244

This would be a handsome revenue for the first year of the new Tax, and perhaps enable Ministers to dispense with any other real burthens to be laid on the Nation.

The collecting might be facilitated by means of Stamps affixed to every parcel of Candles, and every bottle of Oil, sold, the same as advertising Medicines are vended at present.

Or, instead of Stamps, an adequate impost might be levied from every Housekeeper and Lodger, for each Room, Hall, Kitchen, and Passage, not provided with Gas Lights.

In proportion as this Tax decreases, by the progressive use of this new mode of Lighting, a reasonable per centage might be allowed to Government by this Company, because they could then well afford the same,—as it would be but a small deduction from their IMMENSE PROFIT.

However, these are only crude hints which my humble opinion has suggested for the consideration and better judgment of my Friends, my Subscribers, and Superiors.

Difficulties will undoubtedly arise, but these always have, and ever will attend, even the most salutary reforms in all the *moral, political, and physical, or mechanical* systems of life.

As such immense treasures, (far above one hundred and fourteen million pounds) are actually wasted by our present mode of burning Fuel, Oil, Wax, and Tallow, (See Tables B. and C.) I beg leave to submit the following easy Proposals, in addition to those contained in my annexed circular Letter.

- I. That no more than five pounds deposit shall be paid for every nominal fifty pounds share.
- II. That such deposits on 20,000 Shares amount to 100,000*l.* are fully sufficient for the execution of my Plan in several parts of the Metropolis; because Table B. shews, that the first cost of Furnaces, &c. for London, amount only to 78,000*l.* leaving about 22,000*l.* for Coals and Wages during the first month's operation.
- III. That, as the returns of the several valuable products in Light, Coke, Tar, &c. made every twenty-four hours, and oftener, such products may be immediately consumed amongst the Subscribers themselves, and be sold also for their benefit.
- IV. That the first dividends shall be subject to a proportionate deduction, to answer such farther deposits as may, from time to time be deemed necessary for the extension and general introduction of this discovery.

From these preliminaries it plainly appears, that the *real* disbursements for every share is, in fact, no more than the first 5*l.* deposit, which is the whole adventure in an Establishment, the profits of which must soon exceed those of the New-River Company's Shares;* because, daily and weekly returns, from several valuable products, can be made, without the least risk or difficulty.

* The present prices of the New-River Shares are above 13,000*l.* for each original 100*l.* Share.

To conclude,—although a fair and ample refutation to every possible objection is given in my new pamphlet, entitled the *National Light and Heat Company, &c.* still I must repeat, that if all those objections were valid, and amounted to 9-10ths, or even to a 19-20th part in the reduction of my estimated profits, yet the remaining 1-10th, or even 1-20th part of the sum, *must insure* an annual income of near 600*l.* in the first, and near 300*l.* in the last, and most hazardous instance, for every five pounds adventure. Hence, all Traders in raw Fuel, Oil, Wax, and Tallow, will have an easy opportunity of securing to themselves and families a much nobler provision than they could possibly obtain by several years successful drudgery.

97, PALL-MALL.

F. A. WINSOR.

P. S. As several thousand copies of these Proposals are now distributing, gratis, among the most enlightened part of the British Public, I venture to challenge the most able calculators to *disprove* my Estimates—or the most scientific and philosophical Chymists to *disqualify* my official Experiments, on which those Estimates are founded.

G. SIDNEY, Printer,
Northumberland-street, Strand.